MULTIMEDIA UNIVERSITY

STUDENT IDENTIFICATION NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2016/2017

BFM1014 – FUNDAMENTALS OF FINANCE

(All sections / Groups)

27 FEB 2017
2.30 PM – 4.30 PM
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This Question paper consists of 6 pages with 4 Questions only.
2. Attempt **ALL** questions. All questions carry equal marks and the distribution of the marks for each question is given.
3. Please write all your answers in the Answer Booklet provided.

Answer ALL FOUR (4) questions. All questions carry equal marks and the distribution of the marks for each question is given.

QUESTION 1

A. One of the short term liquidity ratios is Current Ratio. Describe the ratio and interpret a value of 3.1x

(4 marks)

B. For any corporation, the primary goal of a Chief Financial Officer is to maximize the current value of the existing stock. Explain briefly (not more than 3 sentences)

(6 marks)

C. Mr. and Mrs. Teo plan to buy a house worth RM 400,000. They managed to get a RHB bank to fully finance the purchase at 5% per annum for 30 years.

i. Calculate the monthly instalment of the financing

ii. Calculate total payment that Mr. and Mrs. Teo has to pay to the bank

iii. Calculate the interest earned by the bank over the period of 30 years

(8 marks)

D. Mr. Toh just deposited RM1,000 today into a saving deposit account that pays 1% per month. He plans to withdraw the deposit at the beginning of the 3rd year.

i. Calculate the interest payment based on simple interest

ii. Calculate the interest payment based on monthly compounding

iii. Calculate the interest payment based on quarterly compounding

iv. Determine interest on interest portion for (ii) and (iii).

(7 marks)

[TOTAL 25 MARKS]

Continued...

QUESTION 2

A. What do you know about the relationship between the coupon rate and the YTM for bond selling at premium, at discount and at par?

(6 marks)

B. Fly High Bhd just issued bonds with a stated a coupon rate of 15% and a yield-to-maturity of 15%. The bonds will mature in three years and the next coupon is due in one year.

i. What is the coupon payment?

ii. What is the fair price for the bond today?

iii. What is the bond classification? Why?

(7 marks)

C. If the price of Highland Corporation stock is selling at RM12, its required return is 20%, and the last dividend was RM 3, what is its dividend growth rate? (Round to the nearest tenth.)

(5 marks)

D. Treasure Quest Bhd just paid a dividend of RM 1.95 per share on its stock. The dividends are expected to grow at a constant rate of 4.1% per year, indefinitely. If investors require a return of 10.2% on this stock, what is the current price? What will the price be in 15 years?

(7 marks)

[TOTAL 25 MARKS]

Continued...

QUESTION 3

A. Why is capital budgeting such an important process in management decision making? Why are capital budgeting errors so costly?

(3 marks)

B. Your first assignment in your new position as assistant financial analyst at Scott Enterprise is to evaluate two new investment new products line proposals based on your understanding of the capital-budgeting process. Both projects require an initial outlays of RM 110,000. The required return on both projects has been established at 12 percent. The expected cash flows from each investment are as follows:

YEAR	PRODUCT A	PRODUCT B
1	RM 20,000	RM 40,000
2	30,000	40,000
3	40,000	40,000
4	50,000	40,000
5	70,000	40,000

In analysing these investments, answer the following questions. Please show your calculation.

i. What is the payback period on each investment? If Scott Enterprise imposes a 3-year maximum acceptable payback period, which of these investments should be accepted?

(4 marks)

ii. Determine the Net Present Value (NPV) of each investment. Which investment should be accepted? Justify.

(4 marks)

iii. What is the logic behind the Net Present Value (NPV)?

(2 marks)

iv. Determine the Probability Index for each investment. Should they be accepted?

(3 marks)

Continued...

C. Differentiate between Financial Leverage and Financial Risk?

(2 marks)

D. Assume the market value of Fords' equity, preferred stock and debt are RM 7 billion, RM 4 billion and RM 10 billion respectively. Ford has a beta of 1.4, the market risk premium is 6% and the risk-free rate of interest is 4%. Ford's preferred stock pays a dividend of RM 3 each year and trades at a price of RM 25 per share. Ford's debt trades with a yield to maturity of 8.5%. What is Ford's weighted average cost of capital if its tax rate is 35%?

(7 marks)

[TOTAL 25 MARKS]

QUESTION 4

A. Briefly explain what is working capital? Bubble Bhd has total assets of RM 689,400, long-term debt of RM 299,500, total equity of RM 275,000, net fixed assets of RM 497,800, and sales of RM 721,500. What is the working capital for Bubble Bhd?

(4 marks)

B. Cromwell Incorporation has the information shown below on its annual Income Statement and Balance Sheet.

ITEMS	RM ('000)
Sales	122,800
Cost of Goods Sold	104,380
Accounts Receivable	10,900
Inventory	1,420
Accounts Payable	22,640

Assume all sales are on credit. Calculate the following:

i. Inventory period
ii. Accounts receivable period
iii. Accounts payable period
iv. Operating cycle
v. Cash cycle

(10 marks)

Continued...

C. What are the five C's of Credit?

(5 marks)

D. Star Glow Lamp Store expects to sell 2000 lamps in the coming year. It costs the store RM 1.00 in carrying costs for each lamp and RM 10.00 for each order placed.

i. What is the economic order quantity for the lamps?

(2 marks)

ii. How many orders will be placed each year?

(2 marks)

iii. If the store wants a one-week safety stock and it takes one week to receive an order after it has been placed, what should the inventory level be when a new order is placed? Assume a 50-week year.

(2 marks)

[TOTAL 25 MARKS]

APPENDIX

Future Value:

$FV = PV(1 + r)^t$

Annuities

$$PV = PMT\left[\frac{1-\frac{1}{(1+r)^t}}{r}\right]$$

$$FV = PMT\left[\frac{(1+r)^t - 1}{r}\right]$$

Perpetuity: PV = PMT / r

EAR & APR

$$EAR = \left[1+\frac{APR}{m}\right]^m - 1$$

$$APR = m\left[(1+EAR)^{1/m} - 1\right]$$

Bond Pricing

$$\text{Bond Value} = C\left[\frac{1-\frac{1}{(1+YTM)^t}}{YTM}\right] + \frac{F}{(1+YTM)^t}$$

Stock Value

$$\hat{P}_0 = \sum_{t=1}^{\infty}\frac{D_t}{(1+R)^t}$$

Estimating Dividends

Zero growth: $P_0 = D / R$

Constant Growth Stock: $D_t = D_0(1+g)^t$

Dividend Growth Model:

$$\hat{P}_0 = \frac{D_0(1+g)}{R-g} = \frac{D_1}{R-g}$$

Nonconstant + Constant growth

$$\hat{P}_0 = \frac{D_1}{(1+R)^1} + \frac{D_2}{(1+R)^2} + \frac{D_3}{(1+R)^3} + \ldots + \frac{D_\infty}{(1+R)^\infty}$$

Net Present Value

$$NPV = \sum_{t=0}^{n}\frac{CF_t}{(1+R)^t} - CF_0$$

Cost of equity

$$R_E = R_f + \beta_E(E(R_M) - R_f)$$

WACC

$= E/V \times R_E + P/V \times R_P + D/V \times R_D(1 - T_C)$

Operating cycle

= inventory period + accounts receivable period

Cash Cycle

= Operating Cycle – Accounts payable period

EOQ Model

$$Q^* = \sqrt{\frac{2TF}{CC}}$$

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